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09/511,526	02/23/2000	Barry W. Jones	99ec019/76257	4196

7590 07/31/2003  
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EXAMINER

PHILPOTT, JUSTIN M

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/511,526

Applicant(s)

JONES, BARRY W.

Examiner

Justin M Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2003.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 18-46 and 48-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-46 and 48-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Amendment***

1. In the Amendment filed May 23, 2003, Applicant has amended the specification to correct minor informalities; amended the claims to correct minor informalities and provide proper antecedent basis; canceled claims 17 and 47; and amended claims 1, 16, 35 and 45 to include limitations which were indicated in the previous office action to comprise allowable subject matter. In view of the amendment, the specification is no longer objected to and the rejection of claims under 35 U.S.C. 112, second paragraph is withdrawn. However, resulting from the cancellation of claims 17 and 47, claims 18, 19 and 48-54 are presently objected to because they depend upon a canceled claim.

2. In view of the Amendment, and if claims 18, 19 and 48-54 are amended to overcome the objection, the application would be in condition for allowance according to the previous office action. However, the indicated allowability of claims 17-21 and 46-56 in the previous office action is withdrawn in view of the newly discovered reference(s) to Putnins et al. Rejections based on the newly cited reference(s) follow.

### ***Claim Objections***

3. Claims 18, 19 and 48-54 are objected to because of the following informalities: claims 18 and 19 depend upon the canceled claim 17, and claims 48-54 depend upon the canceled claim 47. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-16, 18-46 and 48-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,841,771 to Irwin et al. in view of U.S. Patent No. 5,825,779 to Putnins et al.

Regarding claims 1, 16, 35, 45, 46 and 55, Irwin teaches a method of exchanging information between at least some slots of a first T-carrier and some other non-coincidental slots of a second T-carrier (e.g., see col. 14, lines 10-20 and FIGS. 5-7), comprising the steps of: exchanging information between successive slots of the first T-carrier and respective predetermined memory locations within a memory device (e.g., see col. 48, lines 59-63 and col. 15, lines 12-63, particularly lines 28-30), and exchanging information between successive slots of the second T-carrier and at least some of the predetermined locations in memory of the first T-carrier based upon a channel exchange list (e.g., see col. 48, line 65 – col. 49, line 7, and channel connection mapping in col. 43, lines 36-51) relating at least some channels of the first T-carrier to at least some other channels of the second T-carrier. However, Irwin may not specifically disclose compressing information.

Putnins also teaches a method of exchanging information and, further, teaches compressing information. Specifically, Putnins teaches various levels of compression are selected for the information (e.g., see col. 2, line 9 – col. 3, line 25). The teachings of Putnins provide for an improved system wherein different levels of quality of service can be maintained

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for particular information (wherein quality of service corresponds to compression level, e.g., see col. 3, lines 14-20). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Putnins to the method of Irwin in order to provide an improved system wherein different levels of quality of service for information are maintained.

Regarding claims 2, 22 and 36, Irwin teaches incrementing a first counter (e.g., write counter 221 in FIG. 3) coincident with a slot progression of the first T-carrier (e.g., see col. 11, lines 8-10).

Regarding claims 3, 23 and 37, Irwin teaches resetting the first counter (e.g., reset input 223 in FIG. 3) upon detecting a first slot of a repeating multi-frame of the first T-carrier (e.g., see col. 11, lines 10-13).

Regarding claims 4, 8, 9, 24, 28, 29, 41 and 42, Irwin teaches receiving read/write addresses at a memory controller, wherein the addresses are used as memory pointers each identifying a specific block of memory (e.g., see col. 17, lines 45-57). Specifically, Irwin teaches an incoming header (A) is examined in order to fetch a memory pointer (P) that identifies the location for storing the incoming cell payload within the memory (e.g., see col. 18, lines 1-19). By including a cell table (e.g., 481 in FIG. 6) comprising the incoming header (A) coupled with the first counter (e.g., write counter 424, see also col. 16, lines 10-11), the predetermined memory locations (e.g., specific blocks of memory) are determined. That is, Irwin teaches adding an output of the first or second counter to a base memory address to determine the predetermined memory locations of the first or second T-carrier by coupling a counter (e.g., 424)

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with a base address (A, P) to determine the memory locations (e.g., specific blocks of memory) of the T-carrier.

Regarding claims 5, 25 and 38, Irwin teaches a channel-exchange list (e.g., list of addresses, see col. 43, lines 36-51) provided by a channel connection mapping, i.e., a look-up table.

Regarding claims 6, 26 and 39, Irwin teaches incrementing a second counter (e.g., read counter 225 in FIG. 3) coincident with a slot progression of the second T-carrier (e.g., see col. 11, lines 25-29).

Regarding claims 7, 27 and 40, Irwin teaches resetting the second counter (e.g., counter reset 227) upon detecting a first slot of a repeating multi-frame of the second T-carrier (e.g., see col. 11, lines 29-32).

Regarding claims 10-12, 30, 31 and 43, Irwin teaches the first T-carrier is a plurality of T-carriers (e.g., see "any of the 1-n lines 415", col. 15, lines 25-26 and FIG. 6).

Regarding claims 13 and 32, Irwin teaches coupling the second T-carrier to a T-carrier interface device (e.g., ports 511-517, see FIGS. 7 and 9).

Regarding claims 14 and 33, Irwin teaches locating the plurality of predetermined memory locations in a plurality of memory devices (e.g., buffer memory 560 and DS0 memory 520 in FIG. 7).

Regarding claims 15, 34 and 44, Irwin teaches multiplexing the information (e.g., see MUX 411 and DEMUX 412 in FIG. 6).

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Regarding claims 18 and 19, Putnins teaches a compression status list (e.g., see FIGS. 4 and 5) comprises compressed information and uncompressed information (e.g., levels 1 and 2 compression as well as zero/none level of compression).

Regarding claims 20, 21, 47 and 56, as discussed above regarding claims 1, 16, 35, 45, 46 and 55, Putnins teaches compressing information wherein following transmission the system inherently de-compresses the information prior to processing or overwriting memory locations.

Regarding claims 48 and 49, Irwin teaches selecting a slot of the T-carrier interface device and locating the respective predetermined channel locations of the memory device (e.g., see col. 14, lines 10-40). Further, regarding claim 49, Irwin teaches the step of locating the predetermined channel locations of the memory device comprises entering a lookup table (e.g., block of memory, see col. 17, line 45 – col. 18, line 23; see also cell table 481 in FIG. 6) using an identifier of the selected slot (e.g., header A, see col. 18, lines 1-19) of the T-carrier interface device as an index into the lookup table and retrieving an identifier (e.g., memory pointer P, see col. 18, line 11) of a corresponding memory location.

Regarding claims 50-52, Irwin teaches the step of retrieving a corresponding memory location comprises selecting a memory device of a plurality of memory devices (e.g., buffer memory 560 and DS0 memory 520 in FIG. 7). Further, regarding claim 51, Irwin teaches retrieving an identifier (e.g., memory pointer P, see col. 18, lines 1-19) of a memory device. Further, regarding claim 52, Irwin teaches routing performed via a multiplexer (e.g., see MUX 411 and DEMUX 412 in FIG. 6).

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Regarding claims 53 and 54, the step of exchanging information comprises multiplexer 415 and buffers 460, 428 and 429 (see FIG. 6), which implicitly comprises performing serial to parallel or parallel to serial conversion.

### *Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9314 for regular communications and 703.872.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.4750.

Justin M Philpott



July 28, 2003

